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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,320	10/15/2001	Hajime Seki	110-040	5302

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EXAMINER

MEONSKE, TONIA L

ART UNIT PAPER NUMBER

2183

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/926,320	<b>Applicant(s)</b> SEKI, HAJIME	
	<b>Examiner</b> Tonia L. Meonske	<b>Art Unit</b> 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 18 recites the limitation "the operand stack" in line 6. There is insufficient antecedent basis for this limitation in the claim.
4. Claim 18 recites the limitation "the issued instructions" in line 6. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 18 recites the limitation "the operand stack" in line 6. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 19 recites the limitation "the operand stack/uppermost part of the operand stack" in lines 6 and 7. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 19 recites the limitation "the issued instructions" in line 7. There is insufficient antecedent basis for this limitation in the claim.
8. Claim 19 recites the limitation "the completed instructions" in line 11. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 19 recites the limitation "the common remaining lower part" in line 13. There is insufficient antecedent basis for this limitation in the claim.

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10. Claim 19 recites the limitation "said two operand stacks" in line 14. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 18 and 19 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Shang et al., US Patent 5,974,531 (herein after Shang).

13. Referring to claim 18, Shang has taught a stack management system for a computer system for executing operations involved in stack-based instructions out of order, comprising:

- a. a register file having entries, each of which can hold a word of data (Figure 1, column 3, line 25-column 4, line 26, Stack Cache);
- b. an advanced pointer stack that having entries, each of which can hold an entry address in said register file, and, in combination with said register file, is adapted to virtually configure the operand stack depending on all the issued instructions (Figure 1, column 3, line 25-column 4, line 26, element 16);
- c. a completed pointer stack having entries, each of which can hold an entry address in said register file, and, in combination with said register file, is adapted to virtually configure the operand stack depending on all the completed instructions (Figure 1, column 3, line 25-column 4, line 26, elements 16 and 17);

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- d. a data buffer constructed as a circular buffer having entries, each of which can hold a word of data (column 3, lines 49-61); and
  - e. a data cache, wherein: spill/fill operations can be performed between said register file and said data buffer and said data cache (column 3, lines 49-61).
14. Referring to claim 19, Shang has taught a stack management system for a computer system for executing operations involved in stack-based instructions out of order, comprising:
- a. a register file having entries, each of which can hold a word of data (Figure 1, column 3, line 25-column 4, line 26, Stack Cache);
  - b. an advanced pointer stack having entries, each of which can hold an entry address in said register file, and, in combination with said register file, is adapted to virtually configure the operand stack/ uppermost part of the operand stack depending on all the issued instructions (Figure 1, column 3, line 25-column 4, line 26, element 16);
  - c. a completed pointer stack having entries, each of which can hold an entry address in said register file, and, in combination with said register file, is adapted to virtually configure the operand stack/ uppermost pad of the operand stack depending on all the completed instructions (Figure 1, column 3, line 25-column 4, line 26, element 17);
  - d. a data buffer constructed as a circular buffer having entries, each of which can hold a word of data, and being able to hold the common remaining lower pad of said two operand stacks (column 3, lines 49-61); and
  - e. a data cache, wherein: spill/fill operations can be performed between said register file and said data buffer and between said data buffer and said data cache (column 3, lines 49-61).

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***Response to Arguments***

15. Applicant's arguments with respect to claims 18 and 19 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tonia L. Meonske whose telephone number is (571) 272-4170. The examiner can normally be reached on Monday-Friday, with every other Friday off.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie P. Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tlm

  
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